

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/053638 A3

(51) International Patent Classification⁷: **A61K 9/00**,
9/127, 9/50

(21) International Application Number:
PCT/GB2004/005010

(22) International Filing Date:
29 November 2004 (29.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0327814.0 29 November 2003 (29.11.2003) GB
0413139.7 12 June 2004 (12.06.2004) GB

(71) Applicant (for all designated States except US): **PAS-
SION FOR LIFE HEALTHCARE LIMITED** [GB/GB];
55 High Street, Epsom KT19 8DH (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DUGGAN, Alex**
[GB/GB]; 55 High Street, Epsom KT19 8DH (GB).
BARATOUX, Jean-Loic [FR/FR]; 5 Rue Condorcet,
F-92400 Courbevoie (FR).

(74) Agent: **NOVAGRAAF PATENTS LIMITED**; The Cres-
cent, 54 Blossom Street, York YO24 1AP (GB).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:
1 December 2005

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: COMPOSITION AND DELIVERY SYSTEM

(57) Abstract: A composition for nasal or buccal application comprising a distribution of multilayer microparticles in an inactive base, at least one ingredient having activity on the mucosa of the nose/ throat, being adsorbed within the layers of the microparticles so as to be progressively released over time in use; a method for the preparation of the composition for the controlled delivery of an active ingredient over time *in situ* at the mucous membranes of the nose or throat of a human, non-human mammal or other animal comprises the steps of: microencapsulating at least one ingredient having activity on the mucosa of the nose/ throat within or on the layer surfaces of a multilayer microparticle; distributing the ingredient within a suitable base material serving as a means to deliver the microspheres to the active site for example suspending in a liquid base or distributing in a soluble solid base; a method of delivering an active ingredient to the nose or throat of a human, non-human mammal or other animal subject for controlled release over time *in situ* at the mucous membranes of the subject comprises the steps of administering the composition to the subject in such manner that the microparticles are directed towards a desired site on the mucus membrane of the subject; the use of the composition or active microparticle in progressive delivery of an active ingredient; or a novel active microparticle.